

Cellular Immunology

AN INTERNATIONAL JOURNAL

EDITOR-IN-CHIEF: H. Sherwood Lawrence

Volume 61, 1981



ACADEMIC PRESS

A Subsidiary of Harcourt Brace Jovanovich, Publishers

New York London Toronto Sydney San Francisco

Copyright © 1981 by Academic Press, Inc.
All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (21 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1981 articles are the same as those shown for current articles.

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 61

NUMBER 1, JUNE 1981

G. R. FLANNERY, R. A. ROBINS, AND R. W. BALDWIN. Natural Killer Cells Infiltrate Transplanted Chemically Induced Sarcomas	1
GRAEME J. STEWART, BRIAN L. KELSALL, DOMINIQUE J. CHARRON, F. CARL GRUMET, AND THOMAS C. MERIGAN. The Role of HLA-DR Determinants in Monocyte-Macrophage Presentation of Herpes Simplex Virus Antigen to Human T Cells	11
JAMES J. DEVLIN, ROBERT S. YAMAMOTO, AND GALE A. GRANGER. Stabilization and Functional Studies of High-Molecular-Weight Murine Lymphotoxins	22
ISAO OKAYASU, YI-CHI M. KONG, CHELLA S. DAVID, AND NOEL R. ROSE. <i>In Vitro</i> T-Lymphocyte Proliferative Response to Mouse Thyroglobulin in Experimental Autoimmune Thyroiditis	32
BARBARA L. RUPPERT, RICHARD J. FORD, AND ABBY L. MAIZEL. T-Cell Mediated Suppression in the MRL Mouse	40
PAUL E. BAKER, JOHN V. FAHEY, AND ALLAN MUNCK. Prostaglandin Inhibition of T-Cell Proliferation Is Mediated at Two Levels	52
WILLIAM T. SHEARER AND ELIZABETH G. MOORE. Humoral Immunostimulation X. Cytochalasin B Stimulates Complement-Dependent Calcium Uptake in Antibody-Treated Cells	62
MAURICE K. GATELY AND ERIC MARTZ. Early Steps in Specific Tumor Cell Lysis by Sensitized Mouse T Lymphocytes. V. Evidence That Manganese Inhibits a Calcium-Dependent Step in Programming for Lysis	78
Yael BROMBERG AND EDGAR PICK. Activation of Macrophage Adenylate Cyclase by Stimulants of the Oxidative Burst and by Arachidonic Acid—Two Distinct Mechanisms	90
RON N. APTÉ, MOLLY DAYAN, AND EDNA MOZES. Modulation of the Helper Activity of Educated T Cells to the Synthetic Polypeptide poly(Tyr,Glu)-poly(DLAla)-poly(Lys) by Adherent Cell-Bound Antigen	104
CHANG HAI LAI AND PAUL H. MAURER. Mitogenic Property of a Known Sequence Polymer, Poly(Tyr—Glu—Ala—Gly)	114
TERUTAKA KAKIUCHI, HIDEO NARIUCHI, AND TYOKU MATUHASI. Fc Receptors on IgM and IgG Antibody-Forming Cells in an Early Immune Response	124
E. VICTORIA TURNER, JOHN M. MANSFIELD, AND JOHN H. WALLACE. Effects of a Xenogeneic Lymphokine Preparation on Growth of B16 Melanoma in C57Bl/6 Mice	134
MARIA E. ROUX, MICHAEL MCWILLIAMS, JULIA M. PHILLIPS-QUAGLIATA, AND MICHAEL E. LAMM. Differentiation Pathway of Peyer's Patch Precursors of IgA Plasma Cells in the Secretory Immune System	141
GARY R. KLIMPEL, KENNETH DORSHKIND, KATHLEEN D. KLIMPEL, AND CORNELIUS ROSSE. Bone Marrow Cytotoxic Precursor T Cells: Alloantigen-Induced Cytotoxic T-Cell Responses by Murine Bone Marrow Cells <i>in Vitro</i>	154
K. ONOZAKI, S. HAGA, M. ICHIKAWA, Y. HOMMA, K. MIURA, AND T. HASHIMOTO. Production of an Antibody against Guinea Pig MIF. III. Biological Activity of MIF Recovered from Immunoabsorbent Column Chromatography	165
GAYLE D. WETZEL AND JOHN R. KETTMAN. Activation of Murine B Cells. II. Dextran Sulfate Removes the Requirement for Cellular Interaction during Lipopolysaccharide-Induced Mitogenesis	176
YOSHINORI SHIMAMOTO, CHIHARU KUBO, KAZUTO TANIGUCHI, AND KIKUO NOMOTO. Difference in Thymus Dependency between Effector and Suppressor T Cells for Delayed Footpad Reaction to Sheep Erythrocytes in Mice	190
PAULA S. HOCHMAN, GUSTAVO CUDKOWICZ, AND PAUL D. EVANS. Carrageenan-Induced Decline of Natural Killer Activity. II. Inhibition of Cytolysis by Adherent Non-T Ia-Negative Suppressor Cells Activated <i>in Vivo</i>	200

SHORT COMMUNICATIONS

BERNARD VIOLAND AND EFRAIM RACKER. Permeabilization of Ehrlich Ascites Tumor Cells by Human Serum	213
JACK R. BENNINK AND PETER C. DOHERTY. The Response to H-2-Different Virus-Infected Cells Is Mediated by Long-Lived T Lymphocytes and Is Diminished by Prior Virus Priming in a Syngeneic Environment	220
ANNOUNCEMENT	225
PAPERS TO APPEAR IN FORTHCOMING ISSUES	226

NUMBER 2, JULY 1, 1981

EDA T. BLOOM. Density Gradient Fractionation of Effector Cells in Human Natural Cell-Mediated Cytotoxicity	231
RITA BÖSING-SCHNEIDER. Demonstration of Antigen-Specific Suppressor Cells in Unresponsive Nude Mice: A Model for the Induction of Antigen-Specific Suppressor Cells	245
B. M. PARKER AND D. C. LAUX. Selective Induction and Inhibition of Direct and Lectin-Dependent Cell-Mediated Cytotoxic Reactivity	253
R. J. BOOTH, G. T. M. PANG, AND MARIAN R. GATMAN. Soluble Erythrocyte Antigens Preferentially Enhance Cross-Reactive Specificities in Human Antibody Responses	265
RONALD PALACIOS. Role of the Autologous Rosette-Forming T Cells in the Concanavalin-A-Induced Suppressor Cell Function	273
J. C. MAZIÉ, M. JOSKOWICZ, AND J. THÉZE. Expression of GAT-715 Idiotypic by GAT-Specific Plaque-Forming Cells from Various Strains of Mice	280
DAVID W. SCOTT, JANE TUTTLE, AND MARGARET PIPER. B-Cell Subsets Responsive to Fluorescein-Conjugated Antigens. IV. Cross-Stimulation of B Cells Genetically Unresponsive to LPS by Hapten-Conjugated Lipopolysaccharide	292
ANNE COOKE AND S. MARSHALL-CLARKE. Action of Con-A-Induced Suppressor Cells on a B Hybridoma Line	300
J.-M. CAVAILLON, T. N. S. UDUPA, C.-T. CHOU, B. CINADER, AND S. DUBISKI. Interactions between Rabbit B and T Lymphocytes in Mitogenic Response to Staphylococcal Protein A	307
SABURO YAMAMOTO AND TOHRU TOKUNAGA. D-Mannose as a Component of the Macrophage Surface Receptor for Macrophage-Activating Factor (MAF) in Mice	319
ANDREW YEN AND DIANA LEWIN. Uncoupling Lymphocyte Proliferation from Differentiation: Dissimilar Dose-Response Relations for Pokeweed Mitogen-Induced Proliferation and Differentiation of Normal Human Lymphocytes	332
BARBARA N. BECK AND CHRISTOPHER S. HENNEY. An Analysis of the Natural Killer Cell Defect in <i>Beige</i> Mice	343
JOHN W. BELMONT, ROBERT R. RICH, AND SUSAN SOLLIDAY RICH. Divalent Cations and Cytochalasin B-Sensitive Processes in Activation, Synthesis, and Release of Mixed Leukocyte Reaction Suppressor Factor	353
ARTHUR H. HALE, DONALD L. EVANS, AND MARIA P. MCGEE. A Study of the Ability of H-2K ^b -Ia ^t Containing Subcellular Fractions to Elicit Primary Anti-H-2 Cytotoxic T Lymphocytes	365
HIDEO NARIUCHI AND TERUTAKA KAKIUCHI. Responses of Spleen Cells from Mice with X-linked B-Cell Defect to Polyclonal B-Cell Activators, Purified Protein Derivative of Tuberculin, and Dextran Sulfate	375
TULLIA LINDSTEN AND BIRGER ANDERSSON. Studies on Functional Subpopulations of B Cells in Mice. Correction of the Immune Defect of CBA/N Mice by Transfer of C3 Receptor-Bearing B Cells	386
BRYAN T. BUTMAN, THERESA JACOBSEN, ORSUVILLE G. CABATU, AND LILLY Y. W. BOURGUIGNON. The Involvement of cAMP in Lymphocyte Capping	397
PETER S. FRIEND, ARGYRIOS N. THEOFILOPOULOS, JOHN M. FIDLER, AND FRANK J. DIXON. B-Cell Suppression by Anti-IgM Antibody: Humoral and Cellular Analyses	404
YVONNE J. ROSENBERG. The Ability of Nonspecific T-Cell Stimulators to Induce Helper-Cell-Dependent Increases in Either Polyclonal or Isotype-Restricted Ig Production <i>in Vivo</i> ...	416

COMMENTARY

MELVIN COHN. Conversations with Niels Kaj Jerne on Immune Regulation: Associative versus Network Recognition	425
--	-----

HISTORY OF IMMUNOLOGY

ARTHUR M. SILVERSTEIN AND GENEVIEVE MILLER. The Royal Experiment of Immunity: 1721-1722	437
---	-----

SHORT COMMUNICATIONS

Z. S. QUAN, A. J. SATIN, AND J. QUINTÁNS. The Immune Response of CBA/N Mice and Their F ₁ Hybrids to 2,4,6-Trinitrophenylated Antigens. II. Avidity Profiles of Secondary IgM and IgG Responses to TNP-KLH	448
---	-----

RONALD PALACIOS. Cyclosporin A Inhibits the Proliferative Response and the Generation of Helper, Suppressor and Cytotoxic T-Cell Functions in the Autologous Mixed Lymphocyte Reaction	453
--	-----

ANNOUNCEMENTS	463
---------------------	-----

PAPERS TO APPEAR IN FORTHCOMING ISSUES	464
--	-----

AUTHOR INDEX FOR VOLUME 61	469
----------------------------------	-----

The Subject Index for Volume 61 will appear in the December 1981 issue as part of a cumulative index for the year 1981.

